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DRAFT

DEPARTMENT OF THE TREASURY
BUREAU OF ENGRAVING AND PRINTING
WASHINGTON, D.C. 20228

BEP SPECIFICATION FOR FILM: HEAT SHRINKABLE

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers heat shrinkable (or shrink wrap) plastic film for use in currency packaging in the Bureau of Engraving and Printing, hereinafter referred to as the "BEP".

1.2 Classification. This specification covers shrink wrap film in three different widths and two different colors of Cash-Pak film. They shall be identified as listed in Table I.

TABLE I
CLASSIFICATION

BEP Stock No.	Film Use	Width	Roll winding	Color
1L001709	Currency Bundle	53.98 cm (21.25 in)	single wound	transparent, colorless
1L001755	Currency Brick	56.5 cm (22.25 in)	single wound	transparent, colorless
1L001730	Cash-Pak	101.6 cm (40 in)	single wound	transparent, colorless, with blue opaque bands
1L001869	Cash-Pak (New Design currency)	101.6 cm (40 in)	single wound	transparent, colorless, with red opaque bands

A currency "bundle" consists of 1000 currency notes. One hundred notes are strapped together and ten of these straps are banded together before shrink-wrapping.

A currency "brick" consists of four currency bundles shrink-wrapped together.

A currency "Cash-Pak" or "Brick-Pak" consists of four currency bricks shrink-wrapped together.

2. APPLICABLE DOCUMENTS

2.1 Government Documents.

2.1.1. Specifications, Standards and Handbooks. The following documents, of the issues in effect on the date of the invitation for bids or requests for proposals, form a part of this document to the extent specified herein.

BEP SPECIFICATIONS AND STANDARDS

L: VAB-1A Specification for Vendor Affixed Barcode Labels for Bureau of Engraving and Printing Materials

BEP Drawing No. 30083 - Currency-Brick Shrink Wrap Equipment "Brick Pak"

(Copies of BEP documents are available from the Contracting Officer, BEP, 14th and "C" Streets, S.W., Washington, D.C. 20228.)

2.1.2. Other Government Documents, Drawings, and Publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

Publications

29 CFR 1910, Part 1200 -- Hazard Communication Standard (Occupational Safety and Health Administration). See also Federal Register Vol. 48, No. 228, November 25, 1983.

40 CFR 261 - Identification and Listing of Hazardous Waste. See

also Federal Register, Vol. 55, No. 61, March 29, 1990.

40 CFR 720 -- Premanufacture Notification; Premanufacture Notice Requirements and Review Procedures.

40 CFR 761 - Polychlorinated Biphenyls (PCBs), Manufacturing, Processing, Distribution in Commerce and Use Prohibitions .

42 United States Code 6901 et seq., and 6962. See also - General provisions for USC 6901 and Federal Procurement for USC 6962.

Superfund Amendments and Reauthorization Act (SARA) - Title III (1986):

40 CFR 370 --Hazardous Chemical Reporting and Community Right to Know Requirements

40 CFR 372 --Toxic Chemical Release Reporting Regulations

Clean Air Act Amendments of 1990, Section 112, Air Toxics

(The Code of Federal Regulations (CFR) and the Federal Register (FR) are for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. United States Codes (USC) are available as bound volumes from the same source. Reprints of certain regulations may be obtained from the Federal Agency responsible for their issuance.)

California's "Safe Drinking Water and Toxic Enforcement Act" of 1986 (Proposition 65)

(Requests for copies should be addressed to the State of California Health and Welfare Agency, 1600 Ninth Street, Room 450, Sacramento, CA 95814).

2.2Non-Government Publications . The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are applicable are the issues in effect on the date of the solicitation.

ANSI/ASQC Z1.4-1993. Sampling Procedures and Tables for

Inspection by Attributes.

(Requests for copies should be addressed to ANSI/ASQC, 611 East Wisconsin Ave., P.O. Box 3005, Milwaukee, WI 53201-3005.)

American Society for Testing and Materials (ASTM) Methods:

D 374Thickness of Solid Electrical Insulation

D 618Conditioning Plastics and Electrical Insulating Materials for Testing

D 882Tensile Properties of Thin Plastic Sheeting

D 1004 Initial Tear Resistance of Plastic Film and Sheeting

D 1709 Impact Resistance of Plastic Film by the Free-Falling Dart Method

D 1894 Static and Kinetic Coefficients of Friction of Plastic Film and Sheeting

D 1938 -Tear-Propagation Resistance of Plastic Film and Thin Sheeting by a Single-Tear Method

(Request for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103-1137.)

Pantone Matching System Color Formula Guide

(Requests for copies should be addressed to Pantone, Inc., 55 Knickerbocker Road, Moonachie, New Jersey 07074.)

National Motor Freight Classification Rules and Container Specifications

(Request for copies should be addressed to the American Trucking Association, Inc., 2200 Mill Street, Alexandria, Virginia 22314-4677.)

2.3Order of Precedence. In the event of a conflict between the text of this document and the references cited herein, the text

of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

2.4 Internal References. All paragraph and table references will be to paragraphs and tables of this specification, unless stated otherwise.

3. REQUIREMENTS

3.1 Material. The films shall be heat-shrinkable plastic films. The composition or design of the films is left to the discretion of the supplier provided that all the requirements as stated in this specification are met. Test methods referenced in Paragraph 4.3 may be used for periodic quality control and for developing a data base.

3.1.1 Recycled Material. In accordance with the requirements of 42 United States Code 6901, et. seq., and 6962, the BEP encourages the use of the highest percentage of recovered materials practicable in the manufacture and delivery of the finished material as specified herein, as long as all specification requirements are fulfilled.

3.2 Performance in Processing. The shrink wrap films shall be suitable for use on the BEP's automatic examining, banding and packaging equipment. There are three packages formed using this equipment as described below.

3.2.1 Bundle Wrap. This film wraps a bundle of 1000 currency notes. (See section 1.2) The wrapping machine forms the package with the ends sealed and cut by a seal bar (not a wire knife). The bottom overlapped lateral edges of the film are sealed together by the heat in the shrink tunnel. If necessary for proper functioning, this film may have air holes 6.35 mm (0.25 inch)in diameter on 10.2 cm (4 inch) centers. Sealing bar temperature and oven temperature are adjustable up to 200 ^{o}C. Sealing bar dwell-time is adjustable from 0.1 second to 4 seconds and the oven dwell-time is adjustable from 5 seconds to 20 seconds. The package size is approximately 16 cm x 11 cm x 7 cm (w x l x h). The currency bundle shall stay intact during normal handling, including dropping when part of the larger Cash-Pak.

3.2.2 Brick Wrap. Four currency bundles (4000 notes) are wrapped together in this film to form a currency brick which is approximately 16 cm x 46 cm x 7 cm (w x l x h). The brick-forming equipment punches air holes into the unwinding film and forms a package with the ends sealed and cut by a seal bar. The bottom overlapped lateral edges of the film are sealed together by the heat in the shrink tunnel. Sealing bar temperature and oven temperature are adjustable up to 200 ^{o}C. Sealing bar dwell-time is adjustable from 0.1 second to 4 seconds and the oven

dwell-time is adjustable from 5 seconds to 20 seconds. The currency brick shall stay intact during normal handling, including dropping when part of the larger Cash-Pak.

3.2.3 Cash-Pak Wrap. Four currency bricks (16,000 notes) are wrapped together in a transparent, laminated film with opaque bands. The Cash-Pak equipment wraps the group of four currency bricks in a formed package with the ends of the film sealed together by a seal bar. A hot air gun (Technical Packaging Associates part # ST-12, Lester Hot Air Gun or equivalent) directs heat to the overlapped lateral edges of the film helping to form this seal. Some machines may also have a seal bar that comes up from the bottom to help form the bottom lap seal. Sealing bar temperature and oven temperature are adjustable up to 300°C. Sealing bar dwell-time is adjustable from 0.1 second to 4 seconds and the oven dwell-time is adjustable from 5 seconds to 20 seconds. The package is approximately 32 cm x 46 cm x 14 cm (w x l x h). The Cash-Pak equipment punches air holes into the unwinding film. The Cash-Pak shall withstand rough handling without tearing or damage to the contents of the package.

3.2.4 Film Characteristics. The films shall unwind, shrink, seal, and cut satisfactorily on BEP equipment. The films shall each exhibit the following qualities.

3.2.4.1 Impact Resistance. The films for currency bundles, bricks and Cash-Paks shall each have sufficient strength to withstand normal handling without incurring functional damage. Normal handling entails shipping via truck to the destination bank, or to the airport; air transport to the destination city; and truck transport to the destination bank. The handling, especially at the airport, is often rough. Rough handling may include, but is not limited to: drops from 8-12 feet; skidding across the uneven surfaces of an armored car; being tossed into the hold of an airplane where it may be dragged or pushed across raised steel plates or rivets. The films shall have sufficient impact resistance to sustain repeated drops without breaking or tearing. Only air holes that have been put there by the film manufacturer or BEP equipment are allowed. The packages shall withstand three free-fall drops from a distance of three feet without a tear of more than one inch and without multiple tears. The packages shall also withstand drops from three feet onto two corners, one on each end of the package, without sustaining a tear of one inch or more. In addition, the packages shall sustain a drop from a

distance of three feet onto a corner of a pallet or table with a tear of one inch or less. The final drop will be from a distance of eight feet. If a tear occurs at any time during this test, there shall be no tear propagation of the initial tear. If one layer of film sustains a tear, the other films should remain intact. See Attachment B, Free Fall Drop Test. This test forms a part of the specification.

3.2.4.2Fusion. There shall be no fusion between any of the films after processing. When the Cash-Pak is opened, each package shall be easily separated from the others with no adhesion of one film to another .

3.2.4.3Opacity. After processing, the opaque portion of the film used for Cash-Pak shall maintain its opacity so the underlying contents are not visible in the finished package.

3.2.4.4Transparency. The films shall be transparent with the exception of the opaque bands of the Cash-Pak film. Transparency shall be sufficient to allow labels of the currency bundles to be readable through the transparent portion of the Cash-Pak. The currency straps shall also be visible through all layers of film.

3.2.4.5Package Defects. Other than the air-escape holes fabricated by the manufacturer for the bundle wrap or punched by the currency brick and Cash-Pak equipment, there shall be no tears, burn holes, or other imperfections in any of the finished packages.

3.2.4.6Shrinkage. The films shall shrink to conform to the shape of the package and shall remain taut after being cooled. The films should shrink with sufficient tension to remove wrinkles but should not thin around the edges of the package and shall maintain its impact resistance.

3.2.4.7Cutting. The film shall cut cleanly and easily, and should not build-up on the hot knife and/or seal bar.

3.2.4.8Sealing. Packages will be heat sealed at the specified parameters listed in paragraphs 3.2.1, 3.2.2 and 3.2.3 for each package. Two types of seals are fabricated by the wrapping equipment. An end seal is formed by the cutting action of the seal bar. An overlap seam is formed by the lateral edges of the film overlapping each other on the underside of the package.

This seam extends between the two end seals. There shall be no holes in the end seals and no gaps in the overlap seal.

3.2.4.9Odor. The films shall not emit offensive odors during sealing, shrinkage, cooling, and storage of packaged United States currency.

3.2.4.10Slip. The slip of each film shall be such that it will not interfere with the automatic packaging process nor with the handling and storage of the finished package. Example: The currency bundles shall slide easily into the brick film for wrapping and the currency bricks shall slide easily into the final overwrap film to form the Cash-Pak. The currency bricks and Cash-Paks are stacked on pallets and should not block and should be stable on the pallets. The currency bricks are tightly strapped and stored for several days before the final wrapping takes place. The bricks should still slide easily off of one another after two weeks of being strapped and stored without destruction to the overlap seal or to any other part of the package. Films 1L001730 and 1L001869 shall have a coefficient of friction that is between 0.15 and 0.35.

3.2.4.11 Color. The bundle and brick films shall be transparent and colorless. There shall be two different Cash-Pak films, identified as 1L001730 and 1L001869. 1L001730 shall be transparent with two blue opaque bands running the length of the package. (See BEP drawing No. 30083.) The opaque bands of 1L001730 should approximate Pantone 307u. 1L001869 shall be transparent with two red opaque bands running the length of the package. (See BEP drawing No. 30083.) The color of the opaque bands of 1L001869 should approximate PMS 187u. The PMS colors are for reference only. The color shall not change when exposed to heat of the seal bar or shrink oven. The method used to impart the color is to be determined by the contractor as long as all other requirements of this specification are met.

3.2.4.12 Tamper Evidence. The finished packages shall be such that any tampering to remove contents shall result in readily evident destruction to the film. This shall include, but is not limited to, the removal of the labels and the breaking of the end seals and overlap seals.

3.3Physical Requirements. The shrink-wrap films should conform to the requirements listed in TABLES II and III of this

specification. The rolls and films shall also meet the requirements listed below.

3.3.1 Stability. The films shall not block within the rolls and shall show no evidence of deterioration or change in properties that would render them unfit for their specified use when stored for periods not exceeding six months under normal atmospheric conditions where the temperature does not exceed 27°C (85°F). The finished packages shall show no deterioration nor excessive relaxation in storage. Storage after processing can be for extended periods of time, often more than one year.

3.3.2 Roll Defects. The rolls of film should be clean and free from scraps, slitting residue, dirt, and other visible extraneous materials. There should be no telescoping of ends nor ridges or uneven edges.

3.3.3 Film Defects. The films should be free from pinholes, tears, cracks, creases, wrinkles, pits, warpage, checks, blisters, and other defects that would affect the appearance and/or performance. The edges of the film should be linear, cleanly slit and free from nicks.

3.3.4 Thickness. The thickness of each film has been left to the discretion of the supplier. See Paragraph 6.2 for the thicknesses of films in current use. However, the films shall meet all the performance requirements stated in this specification. Once the contractor has identified a thickness that meets or exceeds all the requirements of this specification, the thickness shall not vary more than 10%.

3.3.5 Splices. Splices, if any, shall maintain their integrity in normal use. Splices should be tagged. There shall be no more than one splice per roll of film.

3.3.6 Opaque Bands. The currency shall not be visible through the opaque bands. The Cash-Pak film should meet the requirements of BEP Drawing No. 30083 and the following requirements:

TABLE II
DIMENSIONS OF OPAQUE BANDS

Location and Width of Opaque and Clear Bands after Shrinkage	Minimum cm (inches)	Maximum cm (inches)

Distance of Opaque Band from Lateral Edge	8.25 (3.25)	8.9 (3.5)
Width of Opaque Band	36.2 (14.25)	36.8 (14.5)
Width of Clear Window	11.43 (4.5)	12.1 (4.75)

3.3.7 Rolls. The film shall be wound on paper board cores. The cores of 1L001730 and 1L001869 shall extend approximately 6.35 mm to 12.7 mm (¼ to ½ inch) on each side of the film. The cores shall be of a thickness sufficient to support the film and not collapse during shipment, storage, or use on the wrapping equipment. The construction of rolls shall meet the following requirements:

TABLE III
REQUIREMENTS OF ROLLS

Property	1L001709	1L001755	1L001730	1L001869
Width of Roll, cm (in)				
Minimum	53.98 (21.25)	56.5 (22.25)	101.6 (40.0)	101.6 (40.0)
Maximum	54.6 (21.50)	57.2 (22.50)	102.1 (40.2)	102 (40.2)
Weight of Roll, kg (lb)				
Minimum	18 (40)	18 (40)	40.9 (90)	40.9 (90)
Maximum	23 (50)	23 (50)	45.5 (100)	45.5 (100)
Length of Core, cm (in)				
Minimum	53.98 (21.25)	56.5 (22.25)	102.9 (40.5)	102.9 (40.5)
Maximum	55.88 (22.00)	58.4 (23.00)	104.1 (41.0)	104.1 (41.0)
Splices, Maximum	1	1	1	1

3.4Health and Safety in Handling, Printing, and Processing.

3.4.1<u>OSHA Emission Requirements</u>. During storage, wrapping, cutting and shrinking, and storage of packages after wrapping, the films shall not emit substances that are established as hazardous. The Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and its appendices define health hazards (Part 1200 (c)) and list sources to be used in establishing that certain substances at or above certain concentration levels are hazardous (Part 1200 (d)(3)).

3.4.2<u>Safety and Health</u>. The BEP retains the right to reject any films which cause adverse effects upon its employees. Adverse effects include, but are not limited to: headache; eye, dermal, nasal, or throat irritation and/or sensitization; nausea and dizziness.

3.4.3<u>Material Safety Data Sheets (MSDS)</u>. All MSDS shall comply with Occupational Safety and Health Administration (OSHA) requirements as listed in 29 CFR 1910, Part 1200, paragraphs (g)

and (i).

3.5 Environmental Requirements

3.5.1 Premanufacture Notification. The contractor shall comply with the regulations set forth in 40 CFR Part 720, Premanufacture Notification. 40 CFR Part 720 establishes premanufacture notification requirements under Section 5 of the Toxic Substances Control Act (TSCA).

3.5.2 Proposition 65. If the film contains any of the chemicals listed by California's "Safe Drinking Water and Toxic Enforcement Act," the contractor shall list the names and quantities (concentrations) of any such chemicals.

3.5.3 Superfund Amendments and Reauthorization Act (SARA), Title III. The contractor shall prepare a list of the chemicals and their quantities in the films which are reportable under SARA, Title III of 1986.

3.5.4 Polychlorinated Biphenyls (PCBs). The films shall not contain PCBs in excess of 2 parts per million. The contractor may qualify as an excluded manufacturing process under 40 CFR 761.1 (f)(1) if copies of the certification required by the Environmental Protection Agency (EPA) are provided.

3.5.5 Air Toxics. If the films contain any of the chemicals as an ingredient that are regulated as air toxics by the Clean Air Act Amendments of 1990, Section 112, the contractor shall prepare a list of the names and quantities (concentrations) of any such chemicals.

4. QUALITY ASSURANCE PROVISIONS

4.1 Contract Quality Assurance. The contractor shall rely on its existing quality assurance systems. These systems shall be appropriate to assure that the material supplied to the BEP meets the requirements of this specification.

4.2 Testing

4.2.1 Responsibility for Inspection and Testing. Unless otherwise specified in the contract or in the purchase order, the supplier is responsible for the performance of all inspection and testing requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any

commercial laboratory acceptable to the BEP. Each roll and pallet load shall be inspected for defects as stated in Paragraphs 3.3.2

and 3.3.3. The BEP reserves the right to perform any of the inspections and tests set forth in the specification. This may include periodic quality audits at the facilities of the manufacturers.

4.2.2 BEP Testing. The BEP will evaluate the films on BEP equipment for compliance with the requirements of paragraph 3.2 (Performance) by trial on the equipment. Laboratory tests may be performed periodically, however, acceptance or rejection will be based on results of actual performance on BEP equipment.

4.2.3 Sampling. Sampling for inspection and testing shall be conducted in accordance with ANSI/ASQC Z1.4-1993. Inspection Level (IL) and Acceptable Quality Level (AQL) shall be as follows:

TABLE IV
SAMPLING FOR INSPECTION AND TESTING

Description	IL	AQL
Testing and Inspection	S-1	1.5
Defects in Preparation for Delivery	S-2	2.5

The lot size for the purpose of determining the sample size shall be expressed as 'delivery size' rolls. The sample unit for inspection and for tests not requiring the full roll shall consist of at least 4 m (13 ft) of film, taken after the first five layers of the roll have been removed.

4.3 Testing. Tests shall be conducted in accordance with the following methods. Reference to specific instruments is for information only; use of a company and/or product name in this document does not imply approval or recommendation of the product in preference to others that may also be suitable. The BEP will work with the contractor to establish correlations between various instruments when required.

4.3.1 Test Conditions. Film samples shall be conditioned and tested under environmental conditions that meet the requirements of ASTM D 618.

4.3.2 Thickness. Thickness shall be determined according to ASTM

Method D 374.

4.3.3 Tensile Strength. The tensile strength of the film shall be determined according to ASTM Method D 882, Method A. The sample size shall be 25.4 millimeters (1 inch) in width.

4.3.4 Transparency. Transparency shall be determined according to ASTM Method D 1003.

4.3.5Initial Tear Resistance. Initial Tear Resistance shall be determined according to ASTM Method D 1004.

4.3.6Coefficient of Friction. The Coefficient of Friction shall be determined according to ASTM Method D 1894.

4.3.7Tear-Propagation Resistance. The tear-propagation resistance shall be determined according to ASTM Method D1938.

4.3.8Opacity. The opacity of the film shall be determined by placing currency behind the opaque bands and visually determining if the currency is visible through the bands. The final determination shall be made by BEP personnel.

4.3.9Impact Resistance of Plastic Film by the Free-Falling Dart Method. The impact resistance of the film by the dart method shall be determined according to ASTM Method D 1709.

4.3.10 Impact Resistance. The impact resistance shall be determined according to the drop test described in Attachment B of this solicitation.

4.4Inspection. Inspections shall be conducted for the requirements listed below by paragraph, in accordance with the methods given.

TABLE V
INSPECTION

Paragraph/Requirement(s)	Inspection Method
3.3/Physical Requirements	Visual, Measurement
5./Preparation for Delivery	Visual

4.5Contractor Documentation. The contractor shall certify that the films supplied under this specification meet all the requirements set forth in this specification. The certification shall include a statement of the recovered material content. Signed certification for each lot of film supplied to the BEP shall accompany the reports of inspections and tests. The certificate shall be received with or before shipment. The contractor shall furnish to the BEP's Contracting Officer's Technical Representative (COTR) copies of reports showing the results of inspections and tests for each lot. The reports shall also include the number of rolls made from each lot.

5. PREPARATION FOR DELIVERY

5.1 Packaging and Packing. The packaging shall conform to the Department of Transportation Rules and regulations and shall conform to the applicable requirements of the National Motor Freight Classification Rules and Container Specifications.

5.1.1Roll Packaging. Each roll shall have wooden, metal, or plastic plugs inserted in each end of the core prior to shipment that will prevent collapse of the core during shipping and handling in the BEP. Each roll of film shall be either boxed or wrapped in plastic or paper in such a manner that will prevent exposure to dirt, and damage to the sides, edges, and ends of the rolls.

5.1.2Packing. The contractor shall deliver all rolls on wooden, four-way entry pallets. The bundle and brick films, if boxed, may be stacked three high. Shrink wrap or stretch wrap film shall be applied to the pallet load. The rolls of Cash-Pak film shall be arranged on end in a single layer with each row staggered. Fiberboard caps or equivalent, with one over the load and one under the load, shall be used in pairs. No shifting of nor damage to the rolls should occur during transit or during subsequent BEP storage and handling.

5.1.3Alternate Methods. The contractor may request authorization for alternate methods of packaging from the Contracting Officer, prior to the shipment of any rolls of shrink wrap film.

5.2Marking.

5.2.1 Pallet Marking. Each pallet load shall be legibly marked on two opposite sides with the following:

o"BUNDLE WRAP" (or "BRICK WRAP" or "CASH-PAK WRAP, as applicable)
oBEP stock number
oGross weight of loaded pallet (given in both kilograms and pounds)
oTotal length of rolls (given in both meters and feet)
oDate of manufacture
oBEP purchase order number
oContractor's name

5.2.2 Roll Marking. Each roll shall have a label affixed within the core. Information on the label shall include the following:

oBEP Stock number
oRoll net weight (given in both kilograms and pounds)
oRoll length (given in both meters and feet)
oManufacturer's name
oLot number

5.3 Size and Color of Marking. The pallet load markings shall be legible. The type of film (e.g. Bundle Wrap) and the BEP Stock Number shall not be less than 25 mm (1 inch) high, and of a color contrasting to that of their background. In addition, each pallet shall be labelled in accordance with applicable Department of Transportation Rules and regulations and with the information required by the Occupational Safety and Health Administration Hazard Communication Standard. The core label markings shall be legible, not less than 5 mm (0.2 inch) high and of a color contrasting to that of their backgrounds.

5.4 Bar code Label. Bar code labels shall be placed on the top and two opposite sides of the wrapper of each pallet of film. The labels shall conform to the "Specification for Vendor Affixed Barcode Labels for Bureau of Engraving and Printing Materials" (See paragraph 2.1.1). Each pallet shall be marked in accordance with the categories in section 2.1 of the cited label specification with the following bar coded information:

TABLE VI

BAR CODE INFORMATION

Specification CategoryLabel Information

Product DescriptionBundle Wrap Film 21.25 IN, Brick Wrap Film 22.25 IN,
Blue Cash-Pak Wrap Film 40 IN
or Red Cash-Pak Film 40 IN

PO#Purchase Order Number

Part#1L001709, 1L001755, 1L001730, or 1L001869

QuantityNumber of linear feet of film on the labeled pallet

WeightThe net weight of the pallet

Serial/Lot#A Manufacturer assigned lot number that will distinguish each pallet load from other pallet loads produced in the same production run and which will identify the production run in which the pallet load was made. (If rolls from more than one lot are together on the pallet, each individual roll must be marked with a human readable lot number.)

6. NOTES

6.1 Definitions. Certain words and phrases are frequently used in this specification. The following rules will apply:

6.1.1 "Shall", the emphatic form of the verb, is used whenever a requirement is intended to express a provision that is binding.

6.1.2 "Should" is used whenever a non-mandatory requirement is judged to be the best characte ristic for the material or product. As such it will be graded during the evaluation of the material in order to assist in the selection of the best qualified material.

6.1.3 "May" is used to express non-mandatory provisions.

6.1.4 "Will" is intended to express a declaration of purpose on the part of the Government. It may also be used to indicate simple futurity.

6.2 Films in Current Use. The following description of films in current use at the BEP is given for informational purposes only. It is not required that the offeror duplicate the films in current use, as long as the films provided meet the requirements of this specification. New requirements demand a stronger, more impact resistant package than that currently specified. The currently used films do not necessarily meet the new requirements of this specification as set forth herein.

Currency Bundle Film: Linear low density polyethylene blend film, 1.75 mil thick.

Currency Brick Film: 1.00 mil thick PVC.

Cash-Pak Film:

1L001730: Two-three mil, linear low density polyethylene blend films laminated together with double printing (blue over black) on laminated side of one of the films.

1L001869: Two-three mil, linear low density polyethylene blend films laminated together with triple printing (red over white over black) on laminated side of one of the films.

(END)